



#### **NUCLETRON B.V.**

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Department of Health and Human Services Centre of Device and Radiological Health Office of Device Evaluation Special 510(k) section

# 510(K) SUMMARY OF SAFETY AND EFFECTIVENESS INFORMATION as required by section 807.92(c)

## Submitter of 510(k):

Company name:

**Nucletron Corporation** 

Registration number:

1121753

Address:

7080 Columbia Gateway Drive Columbia. MD 21046-2133

Phone:

410-312-4100

Fax:

410-312-4197 Lisa Dimmick

Correspondent:

Director Assurance & Regulatory Affairs

### **Modified Device Name:**

Trade/Proprietary Name:

Swift 2.0

Common/Usual Name:

Radiation Therapy Planning System

Classification Name:

Accessory to Radiotherapy Device

Classification:

21Cfr892.5050 Class II

#### Legally Marketed Device(s)

Our device is substantially equivalent to the legally marketed predicate device cited in the table below:

Manufacturer	Device	510(k) #
Nucletron BV	Real Time HDR	K022739

#### **Description:**

Swift is a "real time" treatment planning system for brachytherapy especially meant for treatment of cancer in the prostate. Direct 3D Ultrasound imaging of the treatment gives the physician the possibility to update the planning of the dwell positions of the source in the prostate of the patient.

Special 510(k) **Nucletron Swift 2.0** April 2003

The program provides a variety of plan evaluation tools to assist in generating the most optimal dose distribution, i.e. dose volume histograms, dose verification points and dose profiles. The software program provides the physician with anatomical and dosimetric information, to determine the positioning and loading of the radioactive sources, prior to radiation treatment. The program also provides the treatment time and dose distribution for the specified loading. From this the information the patient can be treated with the dwell positions of the source.

K31/58/2

Modifications to the previously cleared device K022739, have been made to add functionality for:

- Encoder
- 3D Ultrasound acquisition
- 3D VOI contouring
- 3D Catheter recognition
- Inverse Plan

The modified device is an accessory to an afterloader. The program consists of two modules:

- Treatment Planning Software: Swift
- Database: Smoothbase

The software runs on a Windows XP platform.

#### Intended use:

The modified device has the same intended use as the legally marketed predicate device cited:

Swift is a software application intended for use with Brachytherapy procedures, i.e. intercavitary, interstitial, intraluminal, involving afterloading radioactive sources.

# Summary of technological considerations:

Swift is substantially equivalent to the cleared predicate device, Real Time HDR, 510(k)#: K022739.

Name: Frits van Krieken

Title: Business Segment Manager

Nucletron B.V.

Veenendaal, The Netherlands

2-4-2503



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

AUG - 7 2003

Ms. Lisa Cole Dimmick Director of Regulatory Affairs Nucletron Corporation 8671 Robert Fulton Drive COLUMBIA MD 21046 Re: K031158

Trade/Device Name: Swift 2.0

Regulation Number: 21 CFR 892.5700 Regulation Name: Remote controlled

radionuclide applicator system

Regulatory Class: II Product Code: 90 JAQ Dated: July 14, 2003 Received: July 16, 2003

# Dear Ms. Dimmick:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at one of the following numbers, based on the regulation number at the top of the letter:

8xx.1xxx	(301) 594-4591
876.2xxx, 3xxx, 4xxx, 5xxx	(301) 594-4616
884.2xxx, 3xxx, 4xxx, 5xxx, 6xxx	(301) 594-4616
892.2xxx, 3xxx, 4xxx, 5xxx	(301) 594-4654
Other	(301) 594-4692

Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97) you may obtain. Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/dsma/dsmamain.html.

Sincerely yours,

Mancy C. Brogdon
Nancy C. Brogdon

Director, Division of Reproductive, Abdominal and Radiological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

**Enclosure** 

510(k) Number

Device Name

# **Indications for Use Statement**

K031158

Swift 2.0

Indications for Use	Swift is a software application for Brachytherapy Treatment Planning, for the treatment of cancer, i.e. intercavitary, interstitial, intraluminal, involving radioactive sources.
PLEASE DO NOT WRITE	BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED
Concurrence of CDRH, Office	ee of Device Evaluation (ODE)
Prescription Use (Per 21 CFR 801.109)	OR Over-The-Counter Use
(Division	Sign-Off) of Reproductive, Abdominal,
and Radio	ological Devices